

METHOD AND APPARATUS CONTROLLING TURBINE/ALTERNATOR ON COMMON SHAFT DURING START-UP

ABSTRACT OF THE DISCLOSURE

An electrical system for a turbine/alternator comprising a gas driven turbine and a permanent magnet alternator rotating on a common shaft includes an inverter circuit connectable either to an output circuit or the stator winding of the alternator. A control circuit during a start-up mode switches the inverter circuit to the stator winding of the alternator and during a power out mode switches the inverter circuit to the output circuit. During start-up the frequency and voltage of the electrical power to the inverter is controlled as a function of the time and/or rotation speed.